

Claims

1. A water fillable blast suppression bin (1, 12, 23) comprising an inflatable container (2, 13, 24) for holding e.g. a bomb, the container comprising an outer layer of ballistics-grade material (4) acting as a last line of containment for a subsequent blast, one or more internal layers for forming containers (6, 7, 9, 17, 18, 19, 20, 21, 22, 24, 25) for holding water and/or gas and/or fibrous material layers to provide separated volumes of water and gas and/or fibrous material in use, and/or fibrous material, such as mineral wool, and closure means (3, 16, 29, 30) also having an outer layer of ballistics-grade material and one or more layers of water and/or gas fillable and/or material containers.

2. A blast bin according to claim 1 further characterised in that the gas is contained in individually fillable polythene bags (8).

3. A blast bin according to claim 2 further characterised in that it has, when filled, volumes of gas such as nitrogen contained in individual polythene bags (8) placed around a suspect device, followed by a layer of water in a fillable container (9) followed by a layer of gas (10), such as nitrogen, followed by a final layer of water in a container (6) adjacent the ballistics grade outer layer (4).

4. A blast bin according to any preceding claim further characterised in including one or more layers of fibrous material (7), such as mineral wool.

5. A blast bin according to any preceding claim further characterised in being substantially cylindrical in shape when inflated (13, 16) having a closed end (14) intended for placement on a flat surface such as a floor and an open end (15) into which a suspect device may be placed, with closure means in the form of a lid (16) for overlaying and sealing the otherwise open end.

6. A blast bin according to any one of claims 1 to 4 further characterised in being substantially spherical (23) when inflated and including an inner container (25) for holding a suspect device, the walls (28) of the inner container being fillable with water.

5 7. A blast bin according to claim 6 further characterised in that the inner container (25) is secured to but spaced from the inside wall (27) of a correspondingly shaped outer container (24), itself fillable with water so as to create a water/gas/water structure when the bin is inflated

8. A blast bin according to claim 6 further characterised in that a water inlet
10 conduit (32) is supplied to the inner container.

~~9. A blast bin according to claim 8 further characterised in that a further conduit (34) is provided for then filling the inside of the outer container.~~

10. A blast bin according to claim 6 further characterised in that separate conduits are provided for filling, respectively, the inner and outer containers.

15 11. A blast bin according to any one of claims 6 to 10 further characterised in that the inner and outer containers are provided with closure means in the form of openable pocket-like slits (29,30) permitting insertion and placement of a suspect device into the inner container either before or after inflation of the bin.

12. A blast bin according to any one of claims 6 to 11 further characterised in
20 that the slits (29, 30) are provided with temporary closure means, such as zips or opposing strips of Velcro®.

13. A blast bin according to any preceding claim further characterised in that means are provided for suspending of the bin centrally within e.g. the fuselage of an aircraft off the floor thereof.

14. A blast bin according to any preceding claim including one or more gas or water inlet valves (31) for introducing gas or water into one or more containers within the blast suppression bin.

5 15. A blast bin according to claim 14 further characterised in including one or more pressure relief valves (33) permitting water or gas to preferentially fill one container within the bin before filling one or more other container within the bin.

16. A blast bin according to claim 15 further characterised in that the preferential container is the innermost container of the bin.

10 17. A blast bin substantially as hereinbefore described with reference to Figure 1, or Figure 2, or Figures 3 and 4, or Figure 5.